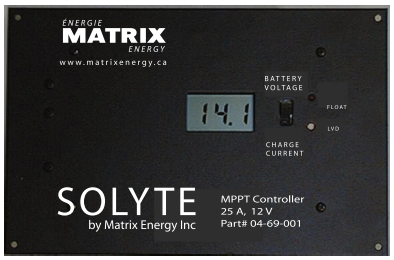
ÉNERGIE MATRIX ENERGY



SOLYTE MPPT

Charge Controller

CURRENT BOOSTING - MAXIMUM POWER POINT SOLAR CHARGE CONTROL

⚠ CAUTION: PRODUCT IS FRAGILE. TO AVOID BREAKAGE HANDLE WITH CARE!
NO REVERSE POLARITY PROTECT.

Description:

The model SOLYTE MPPT is a 25 amp high performance current boosting solar control. Through the use of advanced microprocessor control and a high efficiency power converter, power wasted in older PWM style solar controls is converted into higher charge current.

The SOLYTE MPPT allows for input voltage conversion. This increases the Maximum Power Point voltage and allows for higher boost current over wider operating conditions. You can charge a 12 volt battery from a high voltage solar panel. A high accuracy digital volt and amp meter displays battery voltage and charge current. An auxiliary 100 ma 13.8 volt trickle charger is provided to keep the engine/generator start battery fully charged. A 15 amp capacity low voltage disconnect protects the battery from over discharge conditions. Proper battery charging is maintained over a wide temperature range with the battery temperature sensor. Battery float voltage is accurately regulated. Night time battery discharge is eliminated through the use of a high efficiency Schottky diode. Maximum normalized input power to the SOLYTE MPPT is 250 watts.

PV Charge Current:	25 amps continuous
Surge Current:	35 amps for 10 min.
Array Voltage Open Circuit:	250/50 volts
Input Power Max.:	250 watts
Input Power Min.:	68 watts
PV Input Voltage:	Auto-ranging
Min. Battery Voltage:	10 volts
Operating Temp.:	-20 to +60°C
Float Voltage Range:	12.5 to 15.5 volts
Operating Current:	0.15 amps nominal
Wire Size:	#12 AWG max.
Efficiency:	> 95% at 20 amps
Weight:	2 pounds
Lightning Protection:	1000 watt MOV
LVD Current:	15 amps max.
LVD Disconnect:	12.0 volts
Digital Meter:	½" LCD display
DC Volts Range:	0-99.9 volts ±0.5%
DC Amps Range:	0-99.9 amps ±0.75%
Temp. Comp.:	-18mV/°C nominal
Max PV Input:	50 volts nominal
Reverse Current:	0.01 amps nominal
Min. Battery Capacity:	100 amp-hours
Storage Temp.:	-30 to +70°C
Float Voltage Preset:	13.7 volts
Float Regulation:	±0.05 volts nominal
Mounting:	#6 screws 4 each
Finish:	Black powder coat
Auxiliary Charger:	13.8 volts at 0.1 amps
Dimensions:	7.8" x 5.1" x 2.5"
LVD Current:	20 amps surge
LVD Reconnect:	12.6 volts
Polarity Protection:	None

Operation:

When power is available from the solar panel, the SOLYTE MPPT microprocessor measures and determines the optimum operating point of the solar panel to produce the highest charge current possible to the battery. There is no interaction between the SOLYTE MPPT and other battery charging systems. The float voltage of the SOLYTE MPPT is factory set to 13.7 volts. The float voltage is adjustable. When the battery voltage reaches the float voltage the red Float LED turns on. At this point, charge current to the battery will gradually diminish to maintain the float voltage. As soon a load is turned on, maximum charge current is applied to the battery. Temperature compensation adjusts the float voltage to properly charge the battery over a wide temperature range. When the battery is warm the float voltage will drop and when the battery is cold the float voltage will rise. The SOLYTE MPPT is well suited for flooded, deep cycle and gel type batteries.

A low voltage disconnect is included to protect the battery from excessive discharge by automatically turning off a load, such as lights that may have been left on. Load is disconnected when the battery voltage is 12.0 volts or lower. When the batteries are recharged to 12.6 volts the low voltage disconnect reconnects the load. The yellow LED on the face of the SOLYTE MPPT is lit when the load is active. Operation of the low voltage disconnect is fully automatic. Maximum low voltage disconnect load current is 15 amps. Do not connect the low voltage disconnect to inverters.

Do not hesitate to contact us at **1-866-630-5630** for further information.

NOTE : Pictures may not exactly define contour of components.

S A V E F O R F U T U R E U S E

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